

APPARATUS, METHOD, AND SYSTEM FOR DRAFTING MULTI-
DIMENSIONAL DRAWINGS

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ABSTRACT OF THE DISCLOSURE

According to one embodiment of the invention, a method for interfacing with a surface within a computer-aided drawing environment includes determining that a plurality of curves operable to define the surface constitute a $P \times 1$ surface condition. A $P \times 1$ surface condition is defined by a number of first curves equal to P and only one second curve. P is an integer greater than zero. The method also includes converting the $P \times 1$ surface condition into an $N \times M$ surface condition in response to determining that a plurality of curves constitute a $P \times 1$ surface condition. An $N \times M$ surface condition is defined by a number of third curves equal to N and a number of fourth curves equal to M . N and M are integers greater than one. The method also includes constructing an $N \times M$ surface under the $N \times M$ surface condition. The method also includes modifying the $N \times M$ surface to edit a drawing.